

OPTICAL THROUGHPUT CONDENSER

Abstract

5 An optical throughput condenser re-concentrates light thereby causing light which otherwise would be wasted outside of the useful $A\Omega$ product, also known as optical throughput, of an illuminating system to be redirected back into the useful $A\Omega$ product. The optical throughput condenser includes a thin film having an angle gate such that light striking the surface with a range of incident
10 angles such that the angle of incident is less than or equal to the gate angle (Θ_{GATE}) transmits through the thin film. Light striking the surface with a range of incident angles such that the angle of incident is greater than the gate angle. reflects back from the thin film. An integrating sphere is positioned such that light reflecting back from the thin film is directed towards the integrating sphere
15 so that the light is redirected towards the angle gate.
